

HYDROMENTIA, INC. S154 BASIN AQUATIC PLANT BASED WATER TREATMENT SYSTEM PROTOTYPE



Prototype Treatment System Hyacinth Ponds (front – Left & right), Hyacinth Harvest Flume (front – center) and Algal Turf Scrubber Units (background)

Site: Rio Ranch, Okeechobee Co., FL

Project Description: As one of the thirteen state-funded projects under the Phosphorus Source Control Grant Program, the S-154 Aquatic Plant Based Water Treatment (APBWT) System Prototype is a small scale pilot facility designed to demonstrate the applicability of managed biological treatments for nutrient removal. Operated by Hydromentia, Inc. (HMI), this prototype reduces phosphorus through a two stage treatment process. The first stage consists of water hyacinths, while the second stage consists of algal turf scrubbers. By managing and harvesting the unit processes, the system is being evaluated for maximizing P reduction and estimating scale up costs, while formulating a strategy for the marketability of a useable end product.

Performance: The prototype has averaged an approximate P concentration reduction of 83% over the first nine months of operations.

Funding: \$2,115,215 (State Appropriation, FDEP, FDACS).

Reports: Pilot WHS-ATS Aquatic Treatment System

Contact: Evan Skornick, e-mail: eskornic@sfwmd.gov